

QUEUE SCHEDULING MECHANISM IN A DATA PACKET TRANSMISSION SYSTEM

Abstract of the Disclosure

A queue scheduling mechanism in a data packet transmission system, the data packet transmission system including a transmission device for transmitting data packets, a reception device for receiving the data packets, a set of queue devices respectively associated with a set of priorities each defined by a priority rank for storing each data packet transmitted by the transmission device into the queue device corresponding to its priority rank, and a queue scheduler for reading, at each packet cycle, a packet in one of the queue devices determined by a normal priority preemption algorithm. The queue scheduling mechanism includes a credit device that provides at each packet cycle a value N defining the priority rank to be considered by the queue scheduler whereby a data packet is read by the queue scheduler from the queue device corresponding to the priority N instead of the queue device determined by the normal priority preemption algorithm.

Figures